

METHOD AND STRUCTURE FOR PROVIDING OPTIMAL DESIGN OF TOLERANCED PARTS IN MANUFACTURING

ABSTRACT

5 A method and structure for a computerized method for providing an
optimization solution, includes, for a process, wherein is defined a linear
functional form $y = f(X, c)$, where X comprises a set of independent variables $X =$
 $\{x_1, \dots, x_n\}$, c includes a set of functional parameters $c = \{c_1, \dots, c_n\}$, and y comprises a
dependent variable, where the independent variables set X is partitioned into two
10 subsets, X_1 and X_2 , receiving data for the process and minimizing y with respect to
 X_1 . Dependent variable y is maximized with respect to X_2 , subject to a set of
constraints. The maximizing y includes a global optimum for the process.

YOR920030256US1